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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/008,228	11/07/2001	Deborah S. Schnur	169.12-0507	6958

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EXAMINER

CASTRO, ANGEL A

ART UNIT	PAPER NUMBER
2653	

DATE MAILED: 08/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/008,228

**Applicant(s)**

SCHNUR ET AL.

**Examiner**

Angel A Castro

**Art Unit**

2653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 17-19 and 22-41 is/are pending in the application.
- 4a) Of the above claim(s) 22-26, 30, 31, 33-35, 39 and 40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-19, 27-29, 32, 36-38, 41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/18/04 has been entered.

### ***Election/Restrictions***

2. Claims 22-26, 30-31, 33-35, 39-40 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected Species. Applicant timely traversed the restriction (election) requirement in Paper No. 15.

### ***Allowable Subject Matter***

3. The indicated allowability of claims 17-19 is withdrawn in view of the newly discovered reference(s) to Meyer et al (U.S. Pat. 5,991,113). Rejections based on the newly cited reference(s) follow.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2653

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 17-19, 27-29, 32, 36-38, 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer et al (U.S. Pat. 5,991,113) in view of Albrecht et al (U.S. Pat. 6,344,949).

Regarding claims 17, 27 and 36, Meyer et al discloses a slider for supporting a transducing head 122 proximate a rotating disc (figures 14-15), the slider comprising:

a slider body 118 having a disc opposing face bounded by a leading edge and a trailing edge, the slider body having a longitudinal axis;

an air bearing surface defined on the disc opposing face,

an interface 130 defined on the disc opposing face of the slider body and substantially surrounding the transducing head 122 wherein the interface displaces the transducing head vertically with respect to the slider body to maintain head media spacing (HMS) between the transducing head and the disc at a substantially constant separation distance as the slider flies above the disc.

Regarding claims 18-19, 28-29 and 37-38, Meyer et al discloses that the interface is less stiff than the slider body (column 8, lines 40-60, where element 130 (copper or aluminum) is less stiff than the slider body 116 made of ceramic).

Regarding claims 32 and 41, Meyer et al discloses that the secondary air bearing modulates in response to local disc surface topography to maintain the head media spacing substantially constant (column 10, lines 26-67).

Meyer et al does not specifically disclose that the secondary air bearing is a pad with the transducing head located on the pad. Albrecht et al discloses a slider (figure 4) comprising a pad 110 with a transducing head 122 located on the pad. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the slider of Meyer et al with the pad and a transducing head located on the pad as taught by Albrecht et al.

The rationale is as follows: one of ordinary skill in the art would have been motivated to provide the slider of Meyer et al with the pad and a transducing head located on the pad as taught by Albrecht et al as a centered pad would ensure a more uniform flying height.

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 27-41 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lewis et al (U.S. Pat. 6,570,730) discloses a shear-based transducer for HDD read/write element height control; Kasahara (U.S. Pat. 5,764,432) discloses a recording and reproducing head slider.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angel A Castro whose telephone number is 703-308-8435. The examiner can normally be reached on Monday through Thursday, 8 AM to 6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R Korzuch can be reached on 703-305-6137. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Angel Castro, Ph.D.